UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,706	11/24/1999	TAKAFUMI MIZUNO	35.C14035	6598

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EXAMINER
LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _09 February 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4, 6-10, 12-15, 17-21 and 23-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4, 6-10, 12-15, 17-21 and 23-27_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communication: RCE filed 2/9/04.

2.   Claims 1-4, 6-10, 12-15, 17-21, and 23 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Shafer in view of Murashita. Claims 5, 11, and 16, have been cancelled.

3.   Claims 1-4, 6-10, 12-15, 17-21, and 23-27 are pending in the case. Claims 1, 12, and 23-

27, are independent claims. Claims 24-27 have been added in accordance with the RCE filed.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1-4, 6, 7, 12-15, 17, 18, and 23-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Shafer et al., U.S. Patent Number 5,583,762 filed (8/22/94) in view of

Murashita, U.S. Patent Number 6,330,574 filed (3/30/98).

In reference to independent claim 1, Shafer discloses:

The reduction acquires and operates discretely upon each grammar element of the

hierarchical tree structure. Then a determination is made as to whether each acquired grammar

element is combined with a rule of a given form of tree structure. See column 3, lines 30-40. The

reference demonstrates a ***physical structure judging step*** when it states the '*determination is*

made as to whether each such acquired grammar element is combined with a rule. ' Shafer's

grammar elements consist of tags within a document. The reference further discloses a reduced

grammar or DTD evolved essentially as an automatic process from the originally produced

sample document grouping. This process demonstrates the physical structure judging step

method based upon the evaluation of SGML elements. Shafer makes reference to a '*reduction*

based upon the semantics of SGML wherein, when the text is present at the same level of

structure, then the structure probably is errant'.

The reference does not explicitly disclose judging a semantic structure of each document

element. However, Murashita teaches a special code discriminating unit for determining whether

inputted coded data is a special code showing inputting of coded data of a tag (compare to

(compare "*judging a similarity of the tags based on judgment results of said physical structure*

judging step"). See column 6, lines 55-67. The reference demonstrates a tag evaluation process

as well as a decoding step, which would have provided a proficient technique of merging a tag

with a decode table.

Therefore, it would have been obvious to one of ordinary skill in the art, having the

teachings of Shafer and Murashita before him at the time the invention was made, to modify the

document type definition methods taught by Shafer to include the tag discriminating methods of

Murashita, because the tag methods would have provided a designer the added benefit of having

a reduced grammar.

In reference to dependent claim 2, Shafer discloses:

The program has looked to determine whether there is text around the tag that was found,

and that text is marked PCDATA. The program thus knows where the text is and knows where

the tags are. The reference does not explicitly disclose judging the physical structure of the

document element based on an indention or a blank line; however, the generation and reduction

methods of Shafer demonstrate the analyzing the tags as well as text within the tags. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

In reference to dependent claim 3, Shafer discloses:

The program has looked to determine whether there is text around the tag that was found, and that text is marked PCDATA. The program thus knows where the text is and knows where the tags are. The reference does not explicitly disclose judging the physical structure of the document element based on an indention or a blank line; however, the generation and reduction methods of Shafer demonstrate the analyzing the tags as well as text within the tags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

In reference to dependent claim 4, Shafer discloses:

The program has looked to determine whether there is text around the tag that was found, and that text is marked PCDATA. The program thus knows where the text is and knows where the tags are. The reference does not explicitly disclose judging the physical structure of the document element based on an indention or a blank line; however, the generation and reduction methods of Shafer demonstrate the analyzing the tags as well as text within the tags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

In reference to dependent claim 6, Shafer discloses:

A reduction based upon the semantics of SGML wherein, then text is present at the same level of structure, then the structure probably is errant. See column 14, lines 45-50.

In reference to dependent claim 7, Shafer discloses:

In carrying out the overall reduction, a single grammar element is acquired and a reduction as elected by the reduction guide is carried out with respect to the grammar element. The next grammar element is accessed and the same procedures are carried out. See column 13, lines 18-25.

In reference to dependent claim 12-15, 17, the limitations of these claims are the apparatus for carrying out the method of claims 1-4, 6-10, and are rejected under the same rationale.

In reference to independent claim 23, the limitations of this claim is the computer program product for carrying out the methods of claim 1, and is rejected under the same rationale.

In reference to claims 24-27, the claims reflect similar limitations as those recited in independent claim 1, and therefore are rejected along the same rationale

Allowable Subject Matter

6.   Claims 8, 9, 10, 19, 20, 21, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7.   Applicant's arguments filed 2/9/04 have been fully and carefully considered but they are

not persuasive.

Applicant argues on pages 13 & 14 of the amendment that the reference does not teach or

suggest the limitations of independent claim 1. Applicant further states that Shafer does not

disclose judging the similarity between the physical structures of each of the document elements

in the structured document. Because the claim limitations are to be given their broadest

reasonable interpretation within the scope of the art, the SGML defined grammar methods taught

by Shafer provide a reasonable interpretation of the independent claim. The examiner notes that

(as presently claimed), the broad nature of the term 'judging of the *physical position* of the start

tag of each document element in the structured document', does not preclude the Examiner from

utilizing Shafer to teach acquired grammar elements combined with a rule, which suggests an

element having a physical position within a document. The tag structure taught by Shafer

provides a reasonable suggestion of positional elements within a structured document as tags

within the structure of a document hold a physical position. The methods describe a judging

means for extracting SGML tags. The secondary reference, Murashita, was used to teach a

discriminating method, which examines tag elements and distinguishes between the structure of

each tag within a document. The reference further provides a tag document compressing method

for coding a tag document having a DTD defining a tag showing a document structure. The tags

are part of a document's structure. The tag document compression apparatus and compressing

method according the invention can compress very efficiently not only tags in a tag document,

but also the document other than the tags. The reference provides a reasonable suggestion of

examining a string between a start and end tag when it discloses the ability to examine not only

the tags themselves, but the document, which includes elements and strings. The combinations of

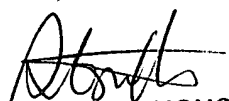references provide a reasonable interpretation of the claimed limitations when read as a whole.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew J. Ludwig whose telephone number is 703-305-8043.

The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEPHEN S. HONG
PRIMARY EXAMINER

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April 15, 2004